

49. (New) Injection molding apparatus comprising a nozzle with a heater, an inner portion having a melt bore extending therethrough, and a tip insert metalurgically bonded to the front end of the inner portion, the tip insert having a melt bore extending therethrough that communicates with the melt bore in the inner portion.

50. (New) Injection molding apparatus as claimed in claim 49, wherein the tip insert is received in a seat at the front end of the inner portion. Fig 3

51. (New) Injection molding apparatus as claimed in claim 50, wherein the seat and the rear portion of the tip insert have matching configurations. Fig 3

52. (New) Injection molding apparatus as claimed in claim 51, wherein the seat and the rear portion of the tip insert are cylindrical. 103 obvious

53. (New) Injection molding apparatus as claimed in claim 49, wherein the heater comprises an electrical heating element brazed into a spiral groove around the outer surface of the inner portion using a first material, and the tip insert is brazed to the front end of the inner portion using a second material having a lower melting temperature than the first material. 103

54. (New) Injection molding apparatus as claimed in claim 53, wherein the tip insert is received in a seat at the front end of the inner portion.

55. (New) Injection molding apparatus as claimed in claim 54, wherein the seat and the rear portion of the tip insert have matching configurations.

56. (New) Injection molding apparatus as claimed in claim 49, wherein the tip insert has a tapered front end, and at least a portion of the melt bore in the tip insert extends diagonally outwardly to the outer tapered surface of the front end of the tip insert.